

CLAIMS

Amendments to the Claims:

1. (Currently Amended) A [[motor]] fan assembly comprising:
a motor containing a stator;
a stator;
a rotor having a shaft and a plurality of blades, wherein the motor rotates the shaft and blades moving air;
a sleeve bearing in contact with the rotor shaft, the sleeve bearing being fixedly secured to the stator; and
a movable support member axially supporting the shaft, the movable support member being movable relative to the shaft.
2. (Currently Amended) The [[motor]] fan assembly as defined by claim 1 further including a housing at least in part encasing the stator, the housing forming a recess for supporting the movable support member.
3. (Currently Amended) The [[motor]] fan assembly as defined by claim 1 wherein the movable support member is a spherical member.
4. (Currently Amended) The [[motor]] fan assembly as defined by claim 3 wherein the spherical member is a ball bearing.
5. (Currently Amended) The [[motor]] fan assembly as defined by claim 1 further including a housing at least in part encasing the stator, the housing forming a recess for supporting the movable support member, wherein the moveable support member is a spherical member and the recess has a depth less than a radius of the spherical member.
6. (Currently Amended) The [[motor]] fan assembly as defined by claim 1 further including a retaining washer about the shaft.

7. (Currently Amended) The [[motor]] fan assembly as defined by claim 6 wherein the shaft has a lower end, the retaining washer being located between the lower end of the shaft and the sleeve bearing.
8. (Currently Amended) The [[motor]] fan assembly as defined by claim 1 further including a rotor hub coupled to the shaft, the rotor hub being spaced from the sleeve bearing.
9. (Currently Amended) The [[motor]] fan assembly as defined by claim 1 wherein the rotor includes a rotor magnet, the rotor magnet being oriented with the stator to bias the rotor toward the movable support member.
10. (Currently Amended) The [[motor]] fan assembly as defined by claim 1 wherein the movable support member contacts the shaft when the motor is right side up and when the motor is upside down.
11. (Currently Amended) The [[motor]] fan assembly as defined by claim 1 wherein the center of gravity of the rotor coincides with an opening in the sleeve bearing that accommodates the shaft.
12. (Currently Amended) A [[motor]] fan assembly comprising:
a motor;
a stator located inside the motor;
a rotor having a shaft and a plurality of blades that [[is]] are rotatably coupled with the stator[;], wherein the motor rotates the shaft and blades moving air;
an upper and lower thrust washer not fixedly secured to the shaft or sleeve bearing; and
a movable support member supporting the weight of the rotor, the movable support member being movable relative the shaft.
13. (Currently Amended) The [[motor]] fan assembly as defined by claim 12 further including a housing about the stator, the housing forming a recess for retaining the support member.

14. (Currently Amended) The ~~[[motor]]~~ fan assembly as defined by claim 12 further comprising a sleeve bearing rotatably coupled with the shaft.
15. (Cancelled)
16. (Currently Amended) The ~~[[motor]]~~ fan assembly as defined by claim 12 wherein the rotor includes a rotor magnet that normally biases the rotor toward the support member.
17. (Currently Amended) The ~~[[motor]]~~ fan assembly as defined by claim 12 wherein the support member has a spherical shape.
18. (Currently Amended) The ~~[[motor]]~~ fan assembly as defined by claim 12 wherein the stator has DC commutation circuitry.
19. (Currently Amended) The ~~[[motor]]~~ fan assembly as defined by claim 14 wherein the center of gravity of the rotor coincides with an opening in the sleeve bearing that accommodates the shaft.
20. (Currently Amended) A ~~[[motor]]~~ fan assembly comprising:
a housing wherein the housing contains a front and a back cover, and the front cover forms an inlet duct and the back cover forms an outlet duct;
a brushless DC fan motor wherein the motor has a stator portion;
wherein the stator portion contains an electromagnet and DC communication circuitry;
a stator;
a rotor having a shaft and a plurality of fan blades extending from a hub;
a sleeve bearing in contact with the rotor shaft, the sleeve bearing being fixedly secured to the stator; [[and]]
an upper and lower thrust washer not fixedly secured to the shaft or sleeve bearing;
a movable [[means]] support member for axially supporting the shaft, the movable [[means]] support member being movable relative to the shaft, wherein the movable support member contacts the shaft when the motor is right side up and when the motor is upside down, and the shaft is shaped to compliment the shape or contour of the support member;[[.]] and

wherein the housing encases the stator, motor, and rotor, and the housing forms a recess for supporting the movable support member, and the support member has a radius that is greater than the depth of the recess.

21. (Currently Amended) The ~~[[motor]] fan assembly~~ as defined by claim 20 wherein the movable ~~[[means]] support member~~ for axially supporting ~~includes is~~ a ball bearing.

22. (Cancelled)

23. (Currently Amended) The ~~[[motor]] fan assembly~~ as defined by claim 20 wherein the shaft has an attached rotor hub that is spaced from the sleeve bearing.

24. (Currently Amended) The ~~[[motor]] fan assembly~~ as defined by claim 20 wherein the rotor includes means for biasing the rotor toward the movable means for axially supporting.

25. (Currently Amended) The ~~[[motor]] fan assembly~~ as defined by claim 20 wherein the center of gravity of the rotor coincides with an opening in the sleeve bearing that accommodates the shaft.

26-36 (Cancelled)

37-43. (Cancelled)